City of Burbank Comments

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PUBLIC WORKS
DEPARTMENT

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Mr. Jonathan Bishop
Interim Executive Officer
California Regional Water Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, CA 90013

COMMENTS ON THE DRAFT TOTAL MAXIMUM DAILY LOADS FOR METALS FOR THE LOS ANGELES RIVER AND TRIBUTARIES

Dear Mr. Bishop:

The City of Burbank Public Works (Burbank) appreciates the opportunity to comment on the proposed Total Maximum Daily Load (TMDL) for metals in the Los Angeles River (LA River). Staff of the Los Angeles Regional Water Quality Control Board (Regional Board) should be commended for their ability to produce this document on a short timeline imposed by consent decrees affecting the United States Environmental Protection Agency (USEPA). The fact that the Regional Board had to rise to the challenge of developing a TMDL quickly and with very little high quality data means that there are many uncertainties and untested assumptions inherent in the proposed TMDL.

Burbank cannot make hasty and costly infrastructure decisions based on significant uncertainty. We care very much about water quality and the protection of beneficial uses, which is why we are offering this comment letter. Our desired outcome is to ensure that the implementation plan for the TMDL is a rational, stepwise approach that reduces planning uncertainties to tolerable levels before committing to major capital investments in our wastewater and stormwater infrastructure.

Burbank is supporting studies to reduce that uncertainty about copper targets in its immediate receiving waters. Burbank is also attending stakeholder steering committee meetings for the City of Los Angeles' collaborative program to support TMDL development. The information needed to reduce uncertainty is coming, but it is going to take time, and it will be important to secure the participation of other stakeholders in the LA River watershed.

Before embarking on costly projects necessary to move the monthly average copper concentration in POTW discharges down into compliance with effluent limits that are proposed based on current default assumptions about copper toxicity, it is important to be sure that the proposed limits are necessary to protect beneficial uses of water. We may find out that with respect to POTW infrastructure, we are already doing what is necessary to protect beneficial uses. The consequences of ignoring the uncertainties is that City resources could be could be misdirected towards capital improvements that aren't necessary, at the expense of more important infrastructural priorities such as sanitary sewer overflows.

Burbank appreciated the opportunity to participate in stakeholder meetings held by the USEPA and the Regional Board to discuss the development of this TMDL. After review of the recently released draft TMDL, we have additional concerns detailed below. Thank you for your careful consideration of these comments.

1. The proposed TMDL does not allow any time for the POTWs in the watershed to achieve compliance with the allocations

The TMDL asserts that, for the most part, historical monitoring has demonstrated that the POTWs can meet the (California Toxics Rule) CTR standards for the metals of concern in this TMDL: cadmium, copper, lead and zinc. This is certainly true for cadmium and zinc, where the historical dry-weather monitoring data at the receiving water stations around the POTWs indicate only *one* exceedance of each metal in approximately 200 measurments.

However, the lead and copper monitoring data indicate that the plants may not immediately comply with the proposed limits in the TMDL. Table 5 on Page 21 of the Staff Report indicates how many times each CTR chronic standard was exceeded for each metal. There are dry weather exceedances of both copper and lead. Added to that is the fact that the TMDL proposes to use a median historical waterbody hardness and the State Implementation Procedures to calculate monthly and daily limits, and the resulting limits cannot be met by the POTWs without additional treatment. The TMDL does not recognize this and requires the POTWs to comply with the allocations as of the Effective Date of the TMDL (Staff Report page 69).

The need for Interim Limits and an Implementation Schedule is supported by (a) the change in the way hardness is used to calculate freshwater chronic aquatic life criteria, (b) the recent upgrade to the Burbank Water Reclamation Plant, (c) the need to pursue reduction of the sources of metals by the pretreatment program, (d) the ongoing development of a Water Effects Ratio (WER) study being performed by the cities of Burbank and Los Angeles, (e) the development of the Integrated Resources Plan (IRP) by the City of Los Angeles, and (f) the necessary time required to design, bid, build and start-up an advanced treatment process for the reduction of metals in the discharge.

(a) There has been a change in the way hardness is used to calculate freshwater chronic aquatic life criteria

In July 2002, prior to the development of the LA River Metals TMDL, Burbank had a study performed to evaluate potential discharge limits using the CTR and the SWRCB's "Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries in California" (SIP). Although the CTR procedures specifies that the receiving water hardness should be used in calculating freshwater criteria for several metal constituents, neither the CTR nor the SIP indicates which hardness value to use (i.e. the average, median or minimum hardness and whether it should be based on data collected upstream or downstream of the discharge).

At the time of the study, POTW discharge limits permit issued to the County Sanitation Districts of Los Angeles County utilized upstream hardness values where available. The NPDES permit for the Long Beach Water Reclamation Plant states, "Hardness values from samples collected in the receiving water upstream of the discharge point were averaged and used to determine the appropriate CTR WQO for those hardness-dependent metals." Since this was the current practice by the Regional Board, upstream hardness was used in calculating the freshwater chronic aquatic life criteria for the BWRP.

Using the upstream hardness in the appropriate equations, the future average monthly and maximum daily effluent limits for copper were calculated to be 24.5 ug/L and 43.3 ug/L, respectively. At that time, the data seemed to indicate that the discharge from the Burbank Water Reclamation Plant (BWRP) would be able to meet these limits. Average discharge copper concentrations at the time of the study were 16 ug/L. Therefore, additional upgrades to the BWRP did not appear necessary for this constituent.

Contrary to recent practices by the Regional Board in issuing NPDES permits, the TMDL calculates hardness for the chronic criteria based on the 50^{th} percentile of the hardness data for each reach and the target for the acute criteria was based on the 10^{th} percentile of the hardness data for each reach. This results in a much lower waste load allocation (WLA) than was previously anticipated. The new copper WLA of 12 ug/L cannot be met by the BWRP unless additional source control measures are implemented and/or advanced treatment is constructed. The effectiveness of source control measures is discussed under item 1(c).

(b) There has been a recent upgrade to the Burbank Water Reclamation Plant

Since this analysis was performed in July 2002, the Regional Board promulgated the *Total Maximum Daily Loads for Nitrogen Compounds and Related Effects – Los Angeles River and Tributaries and Water Quality Objectives* (Nutrient

TMDL). The Implementation Plan for the Nutrient TMDL necessitated the upgrade of the Burbank and Los Angeles POTWs to a nitrification / denitrification process. In order to comply with this Nutrient TMDL, the BWRP underwent a seven million dollar upgrade to a nitrification / denitrification facility. This successful upgrade resulted in the reduction of discharge ammonia concentration from 20 mg/L to less than 0.5 mg/L with no loss to the plant capacity.

Unfortunately, an unintended result of this upgrade was a decrease in the plant's copper removal efficiency. The five discharge samples collected immediately before the new process began indicated an average copper concentration of 15.7 ug/L. Post start-up of the nitrification / denitrification process, the five most recent samples showed an average copper concentration of 49.8 ug/L. The cause for this loss of copper removal efficiency is currently being investigated.

(c) There is a need to pursue reduction of the sources of metals by the pretreatment program

In the development of the Clean Water Act, Congress recognized that, unlike industries, the wastewater treatment systems used by POTWs are not designed to effectively treat toxic pollutants. (See 33 U.S.C. §1317.) Thus, to address toxic pollutants, the USEPA was required to promulgate "pretreatment standards" for categories of industrial sources discharging into the POTW to prevent pollutants from entering a POTW, which are "not susceptible to treatment by such treatment works, or which would interfere with operation of such treatment works." (See 33 U.S.C. §1317(b), (c); see also 33 U.S.C. §1314(g) (requires adoption and annual review of pretreatment guidelines for pollutants "not susceptible to treatment" by POTWs) (all emphasis added).)

Congress determined that "[i]n the long run, the only real solution to the problem of safe disposal of toxic or hazardous industrial pollutants is in their reuse and recycling by industry, not the transfer of such materials from one industrial waste stream into municipal waste streams." (See Sen.Rep. No. 95-370, 1st Sess. (1977), reprinted in U.S. Code Cong. & Admin. News, p. 4326, 4383.)

Sources of copper include copper pipe corrosion, metal finishers, vehicle service facilities, printers, copper sulfate additions to source water reservoirs, copper containing root control products, and laundry graywater. Programs targeting these sources have been conducted by several agencies[1] including the program in Palo Alto.

Palo Alto has worked for over 10 years on pollution prevention to control copper by focusing on one or two sources at a time. Even though the agency has an award winning pollution prevention program, the only way Palo Alto has been

[1] Water Environment Research Foundation. Residential and Commercial Source Control Programs to Meet Water Quality Goals. Project 95-IRM-1. 1998.

able to meet the copper limit derived from the CTR has been to adjust those limits to site specific conditions, through special studies similar to the WER study sponsored by Burbank and Los Angeles.

The Palo Alto experience demonstrates the limitations of pollution prevention and source control. Programs relying on voluntary cooperation cannot expect 100% of the targeted audience to make the recommended changes. Programs relying on voluntary cooperation cannot expect 100% of the targeted audience to make the recommended changes.

In addition, maximum participation may take years to achieve. Even programs with a regulatory element will not always achieve full participation in the first year. For example, with copper, several sources were identified, but not all of them were easily controllable. It was not possible to eliminate the largest identified source, corrosion of copper plumbing. Thus for copper, even though several sources were identified, the largest source – corrosion of copper plumbing – was not controllable, even with the addition of corrosion control chemicals to the water supply. For situations like this, an approach such as changing the state plumbing code to allow for the use of plastic rather than copper piping would be necessary. Changes like this cannot be made at the local level.

Therefore, the first strategy for the reduction of metals in the discharge from POTWs is implementation of tighter pretreatment standards and pollution prevention. Concurrently with the development of accurate metals targets and WLAs through WER studies, the initial work can begin on local limits for industrial discharges into the POTWs. This approach is the most reasonable method to achieve the water quality objectives in the Burbank Western Channel and the LA River.

(d) There is a Water Effects Ratio (WER) study being performed by the cities of Burbank and Los Angeles

The cities of Burbank and Los Angeles have committed over three hundred thousand dollars to perform a scientific study in the LA River and the Burbank Western Channel. The purpose of this study is to determine the Water-Effect Ratio[2] (WER) for copper in the LA River downstream of the discharges of each of three municipal tertiary wastewater treatment plants – two operated by the City of Los Angeles and one operated by the City of Burbank. The WER connects water quality objectives to beneficial uses. It is important to know what copper concentrations in the River are potentially harmful to aquatic life. National water quality criteria are based on toxicity data in laboratory dilution water. The WER converts national water quality criteria for copper to site-specific objectives based on observed toxicity in the River itself, rather than in laboratory dilution water.

[2] A WER is used to determine whether physical and chemical characteristics in the site water affect the bioavailability and toxicity of copper to aquatic organisms. WER = Species EC50 in site water ÷ Species EC50 in laboratory water.

The WER is an important factor used under the USEPA system of copper water quality criteria to customize national aquatic life threshold toxicity values to site-specific ambient water column conditions. A copper WER developed for specific reaches of the LA River, if approved by the the Regional Board / State Board, and USEPA Region 9, can be used in the future to:

- evaluate the 303(d) copper impairment status of the three River reaches,
- conduct Reasonable Potential Analyses (RPA) for copper, and
- calculate maximum allowable copper concentrations in effluent for municipal and industrial National Pollutant Discharge Elimination System (NPDES) permits such that aquatic life in the LA River will be protected.

The WER determined by this study will support development of a copper site specific objectives (SSO) for specific reaches of the LA River. The SSO can be formally included by the Regional Board, with the approval of the SWRCB and USEPA, in the Basin Plan for the LA River. Alternatively, if recommendations made by the SWRCB staff in August 2003 are implemented, the WER could be approved through the NPDES permit process as a site-specific modification to CTR copper criteria.

A preliminary WER Study completed by the City of Los Angeles in July 2003[3] for dry weather conditions showed that a WER using USEPA protocols could be successfully determined for the LA River. Preliminary results suggest that the WER is higher than 1.0. In other words, the default criteria in the CTR appears to be over-protective for aquatic life. To support the community's long term vision of enhanced habitat in the LA River, it is essential to establish water quality objectives that accurately reflect beneficial uses.

The results from the Copper WER study will ultimately help the community set priorities for different implementation actions, such as stream habitat enhancement, best management practices to reduce urban runoff copper loads, and treatment plant upgrades if necessary to comply with site-specific water quality objectives. If immediate compliance is required in the TMDL, there will not be sufficient time to perform the Copper WER study and will likely result in its termination.

(e) The development of the Integrated Resources Plan (IRP) by the City of Los Angeles is ongoing

The City of Los Angeles' Integrated Resources Plan (IRP) will describe a future vision of water, wastewater and runoff/storm water management in Los Angeles that explicitly recognizes the complex relationships that exist among the region's water resources activities and functions. Addressing and integrating the water, wastewater, and runoff needs of Los Angeles in the Year 2020, the IRP also

[3] Preliminary Copper Water-Effect Ratio (WER) Study for the Los Angeles River. LWA 7/31/03

takes an important step towards comprehensive basin-wide water resources planning in the Los Angeles area.

The Regional Board has been a part of this process and has frequently praised it for its multifaceted long-term approach. This TMDL discounts the development of this plan, and does not recognize the possibility for the expansion of treatment plants or the other various alternatives that are available. If interim limits are given in the TMDL and the Implementation Schedule includes a phased approach for POTWs, the IRP will continue to be a fruitful process.

(f) Time is necessary to design, bid, build and start-up an advanced treatment process for the reduction of metals in the discharge

If the TMDL is approved in its current form, the POTWs will fall into immediate non-compliance at the adoption of their next permits scheduled for July 2005 (Staff Report page 62). Even if a compliance schedule is given in the NPDES permit, the five years allowed for interim limits is insufficient to perform source control, pre-design, design, bid, build and start-up of a facility. If reverse osmosis is necessary for compliance and a brine line must be constructed, an even longer period is needed for the design, land acquisition, permitting and construction.

Due to these six reasons, interim limits should be created for the POTWs and the Implementation Schedule should reflect a phased approach. Exhibit 1 is a proposed Implementation Schedule that allows POTWs the necessary time to take the appropriate steps to bring their discharges into compliance with water quality objectives.

Recent data for the BWRP was analyzed for to determine the appropriate interim limits. Since the BWRP has upgraded its facility to a nitrification / denitrificaiton process, a significant change in copper effluent has been realized. At the same time, a minimum of ten data points are required for the statistical analysis of interim limits. Therefore, a limited number of data points prior to the upgrade are included in the analysis.

When the copper dataset is graphed and a best-fit line is drawn, it tends to be more accurate as an exponential line than a normal line. In other words, the data "fit" this model better if they're transformed to log values. Therefore, the interim limits are based on use of the lognormal transformed dataset and best-fit regression line equation.

The thirty-day average and daily maximum interim limits for total copper are based on the 95th and 99th percentiles of effluent performance data reported by dischargers. This was the same method used for the calculation of interim limits in the LA River Nitrogen Compounds and Related Effects TMDL. Exhibit 2 includes the proposed interim limits for the BWRP and language that can be included in the TMDL regarding the interim limits.

2. The proposed TMDL does not include any discussion regarding the implementation strategy or cost analysis for the POTWs in the watershed to achieve compliance with the allocations

Since the Regional Board assumed the POTWs could immediately comply with their allocations, the proposed TMDL does not include an implementation strategy or any associated costs of additional treatment that will be incurred at the POTWs to meet these allocations. Adding treatment to a land-locked existing POTW can be very costly and those costs should not be ignored or disregarded. Burbank recommends that the proposed TMDL include language in the TMDL that addresses these necessary upgrades and takes into account the projected costs of compliance. Exhibit 3 has been attached which provides the language that can be inserted into the TMDL.

3. The proposed TMDL includes allocations for metals where there are no impairments

The data presented in the TMDL clearly show that there is no existing impairment for cadmium and zinc in the LA River or the Burbank Western Channel. The first step of a TMDL should be the verification of an existing impairment. Where an impairment is not found to exist, WLAs should not be created.

In case of cadmium, there are dry-weather monitoring results for four waterbody reaches in the watershed (Staff Report Table 5). For three of the four reaches, there were zero exceedances of the CTR limits, when adjusted for hardness, for cadmium during dry weather." (See Staff Report at 23.) In the fourth reach, there was one exceedance out of 96 measurements. In all, there was only one exceedance of the CTR criteria in 202 dry-weather samples taken from four locations in the watershed.

In the stormwater monitoring data for cadmium (taken from only one station in the watershed), only three of forty-two measurements exceeded the CTR criteria. Clearly, a review of this impairment should be made, and the metal should be delisted from the two reaches in the watershed where the impairment is listed.

During the 2002 listing process, Burbank made comments to the State Water Resources Control Board (State Board) requesting the delisting of cadmium from the Burbank Western Channel. Instead of delisting the waterbody, the State Board chose to move the TMDL priority to low until more data were collected. Burbank was assured by State Board Members Baggett and Carlton that if additional data continued to show that water quality standards were being met, a TMDL would not be created for cadmium in this waterbody.

The data in the TMDL for zinc samples are similar to those for cadmium. Zinc exceeded the chronic criteria only seven times out of 240 samples. This data indicates that a TMDL for zinc is not justified and should also be delisted.

Although Burbank may not need to perform treatment plant upgrades to meet the WLAs in the TMDL for cadmium or zinc, there are substantial costs associated with the monitoring required to prove every source is in compliance. The resources that would need to be spent toward proving compliance could be better utilized toward solving real water quality impairments in the LA River.

4. The proposed TMDL should focus on Best Management Practices (BMPs) for stormwater rather than numeric limits and compliance monitoring

Although USEPA policy allows wasteload allocations for storm water to be expressed in numeric form, it is not required. Specifically, USEPA's 2002 Storm Water TMDL/Permitting Guidance states that, "USEPA expects that most WQBELs for NPDES-regulated municipal and small construction storm water discharges will be in the form of BMPs, and that numeric limits will be used only in rare instances." See accord 40 C.F.R. §122.44(k)(2) and (3).

Burbank supports the overall iterative process of BMP assessment and implementation. We recognize the Regional Board encourages the use of smaller BMPs that address pollutant sources in preference to end-of-pipe treatment. The Regional Board has also encouraged agencies to pursue sediment removal BMPs, since metals may be associated with particulates. However, data needs to be gathered to fully evaluate such BMPs, and be able to provide assurances that standards will be met in receiving waters.

The San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) recently recognized this approach through stakeholder negotiations with stormwater programs over the mercury TMDL for San Francisco Bay. In the revised Basin Plan amendments scheduled to be heard by the SFRWQCB on September 15, 2004, language added by staff clearly states that compliance is determined by implementation of BMPs to the maximum extent practicable.

All references to numeric limits for evaluation of wet weather compliance by MS4 stormwater programs and CALTRANS should be removed, as there is insufficient evidence that numeric limits for stormwater can be feasibly attained or even scientifically monitored. In the proposed Basin Plan amendment, under Waste Load Allocations, heading MS4 and Caltrans Stormwater Permittees, remove the paragraph beginning with "For wet-weather conditions, a load reduction curve is developed…." Replace that paragraph with: "Compliance during wet weather will be assessed through benchmark objectives for BMPs specified by the compliance plan. The validity of these benchmarks will be assessed through

provisions provided within the TMDL-required monitoring plan; these provisions will provide the Regional Board assurances that standards in the receiving water will be met to the maximum extent practicable. The benchmarks and monitoring provisions may be adjusted by the Executive Officer through an iterative and adaptive process as necessary data is obtained." Similar changes to section 6.4 of the Staff Report should also be made.

5. The critical flow determined at Wardlow is below the permitted flow of the POTWs

The proposed waste load allocations (WLAs) are greater than the load capacity of the river (Staff Report Tables 28 and 29) because the proposed permit calculations were done using the total design flow for the POTWs. However, the WLAs for the river are based on a critical flow at Wardlow of 145 cfs, which is less than the combined design flow of 169 cfs that the three treatment plants discharge to the river. We support the use of permitted plant design flow for the calculation of plant WLAs. See accord 40 C.F.R. §122.45(b)(1). These plants have been designed and permitted to handle these higher flows, which will translate into higher river flows when design capacity is met. Further, the IRP's public planning process is anticipating an increase in growth and associated water usage and disposal to the sanitary sewer and is considering expansion of the design capacity of these facilities to handle these increased flows. Burbank is also in the pre-design phase of the construction of an equalization basin which will increase the design flow at this facility to 12.5 million gallons per day.

The WLAs for the entire river should not be based on a flow that is less than the design flow of the three treatment plants. WLAs should be calculated on the basis of design flow plus some additive component for urban runoff discharge, as this will be the minimum flow in the river during dry weather conditions in the future. Application of a number, which is based on historical median stream gage flows, unreasonably limits POTWs from fully utilizing existing capacity that has been approved and funded by USEPA and permitted by the Regional Board.

A minimum critical flow based on POTW design flow plus an allocation for urban runoff flow contribution (e.g. equivalent to 20-40% of historical stream flows considered in the development of this TMDL) is recommended, with periodic reassessment and adjustment of the TMDL and WLAs to account for treatment plant expansions due to growth.

A reconsideration of the critical flow for the entire river is warranted. As part of our continuous planning process, we need to know the total metals load that can be assimilated when the river has reached future flows already permitted through public process. With that information, we can plan POTW and stormwater infrastructure and management in a reasoned and rational manner that will protect beneficial uses now and into the foreseeable future.

6. Legal comments regarding the proposed TMDL

A. Comments on Resolution No. 2004-XXX:

(1). The Regional Board states that the "numeric targets in this TMDL are not water quality objectives and do not create new bases for enforcement against dischargers apart from the water quality objectives they translate." Res. 2004-XXX at para. 4.

The claim that the numeric targets are not water quality objectives conflicts with a later statement that "the amendment is consistent with the State Antidegradation Policy (State Board Resolution No. 68-16), in that the changes to the water quality objectives…" Res. 2004-XXX at para. 12 (emphasis added). The TMDL cannot on the one hand state that the targets are not objectives, and on the other hand say the changes made to the objectives are consistent with antidegradation. Either the objectives are being changed or not, and the Resolution must make clear which is the case. If the targets are new objectives, then the Regional Board must comply with Water Code §13241 prior to imposing requirements based upon these objectives.

The second claim that the targets create no new bases for enforcement is also unfounded since the following sentence is the link to new enforceable requirements. The next sentence states that "The targets merely establish the bases through which load allocations (LAs) and waste load allocations (WLAs) are calculated." *Id.* The problem arises in that the targets are the basis for the WLAs, and the effluent limits in permits must be "consistent with the assumptions and requirements of any available wasteload allocation for the discharge." 40 C.F.R. §122.44(d)(vii)(B). Thus, the TMDL's numeric targets are an indirect regulation of the discharges, and the above claim is not accurate.

(2). The Resolution is legally infirm for not complying with Government Code §11353.

The Resolution at paragraph 15 concludes, with no citation of evidence to support this conclusion, that the "regulatory action meets the 'Necessity' standard of the Administrative Procedures Act, Government Code, Section 11353, Subdivision (b)." Without evidence, the Regional Board has not included in the record of the rulemaking proceeding a demonstration by substantial evidence the need for this regulation to effectuate the purpose of the statute, court decision, or other provision of law that the regulation implements. Govt. Code §11349(a). It is unclear from the record how a TMDL for all metals is a necessity for waters that are not even included on the state's 303(d) for each of the metals, or why WLAs for each metal need to be applied to all point sources whether or not they are in compliance with the objectives underlying the TMDL, or discharging into reaches of the river or its tributaries that are not deemed impaired. As such, this claim that the Necessity standard has been met is suspect.

Further, the Regional Board need not only meet the Necessity standard. The Office of Administrative Law is also obliged to review this regulation to determine compliance with the standards of authority, clarity, consistency, reference and nonduplication as each are defined in Govt. Code §11349. It is not clear that the Metals TMDL can prove compliance with these standards given the issues raised herein.

B. Comments on Attachment A to Res. No. 2004-XXX:

(1). Problem Statement Needs Refining

The finding states that "the Regional Board has identified the Los Angeles River and its tributaries as impaired due to copper, cadmium, lead, zinc, aluminum and selenium." This should be corrected to read "the Regional Board has identified certain reaches of the Los Angeles River and its tributaries as impaired due to copper, cadmium, lead, zinc, aluminum and/or selenium. No reach of the River or the tributaries is listed for all of these metals."

In addition, the problem statement should state that the water supply (MUN) and groundwater recharge (GWR) uses do not exist throughout all reaches of the River and its tributaries. Most are designated only conditionally for MUN and this use cannot be used to drive regulation. The GWR use does not exist anywhere where the channels are concrete-lined and may not exist where the only reason that the channels are soft-bottomed is due to groundwater up-welling, and little to no recharge is occurring.

Finally, there needs to be some explanation of how each of these uses is impaired by each of these metals. Just because a criterion is exceeded, this is not necessarily conclusion of a use impairment since the CTR criteria were not set specifically to address waters that are effluent dominated and flow through concrete-lined channels.

(2) Numeric Target Issues

It is unclear why dry-weather numeric targets are necessary. For many reaches, there were "zero exceedances of the CTR limits, when adjusted for hardness, for cadmium during dry weather." (See Staff Report page 23.) The copper listings were based on stormwater data. *Id.* at 23. Lead was listed for sediment, and exceedances were primarily during storms. *Id.* at 24. Zinc was listed based on stormwater data, and the exceedances are during storm events. *Id.* at 24-25.

Since TMDLs are supposed to recognize seasonal variations (33 U.S.C. §1313(d)(1)(C)), the targets should only apply to each of the metals in the actual reaches that are impaired. Many of the impaired reaches are downstream from

reaches that are not deemed impaired. Therefore, there is no justification for applying the targets to these unimpaired upstream reaches and tributaries.

Some of the concentration targets for cadmium and copper are below the CTR criteria. Three of these instances are in reaches not listed for cadmium. Inadequate justification exists for the need for targets below the water quality criteria.

(3) Wasteload Allocations

The explanation of why both concentration and mass WLAs are needed is lacking as is whether the concentrations for the POTW loads are dissolved or total. The "Other Permitted Discharges" are specified as "expressed as total metals," but the POTW section is silent.

This section does not explain why both daily and monthly limits are needed. The daily WLAs may result in effluent limits that are inconsistent with 40 C.F.R. §122.45(d)(2), unless the Regional Board includes an analysis at some point as to why longer term limits are impracticable. Like the allocations for storm water, the POTW WLAs should be "met within the receiving water for each of the reaches rather than at the end-of-pipe." (See TMDL Attachment A page 5.)

(4) Load Allocations

The information contained in this section is not based upon substantial evidence. The findings containing phrases such as "unlikely to contribute significantly" and "believed to be minor" should be deleted if not supported by evidence in the record. See also Staff Report page 58 ("thought to be" and "expected to be") and 61 ("believed to be" and "do not believe").

(5) Implementation

The Implementation section is incorporating a regulatory requirement specifically rejected by the federal government. The requirement that the stormwater permittees "provide reasonable assurance" was part of the TMDL regulations promulgated by USEPA that were overturned by congressional order. Therefore, it is inappropriate to include such a requirement in this TMDL. (*See also* Staff Report page 67.)

(6) Compliance Monitoring and Assessment

All sources should have equivalent monitoring and compliance assessment requirements. Stormwater permittees are deemed "to be in compliance with the TMDL if the in-stream pollutant concentration at the first downstream compliance assessment location is equal to or less than the corresponding concentration- or

load-based wasteload allocation." (See MDL Appendix A page 8; see also Staff Report page 56.) This should be the standard for all sources.

The alternative compliance determination for stormwater of assessing compliance with targets at the storm drain outlet (TMDL Attachment A page 8), or the requirement of effluent monitoring for POTWs (TMDL Attachment A page 9) ignores that the TMDL and its WLAs are receiving water targets that should be based on the receiving water, not end of pipe for effluent or stormwater to which the CTR criteria do not apply. (See also Staff Report page 56.)

C. Comments on the Staff Report:

(1) The front cover and the Introduction of the Staff Report identify the USEPA Region IX and the Regional Board as jointly issuing this document. However, USEPA Region IX did not publish notice in the Federal Register of this draft TMDL.

In a letter dated May 6, 2003 (see attached Exhibit 4), USEPA Region IX agreed to publish draft TMDLs in the Federal Register. Since the USEPA Region IX is listed as jointly establishing this TMDL with the Regional Board, it did not comply with its agreement to publish this draft TMDL in the Federal Register.

(2) The TMDL improperly adopts a TMDL for unlisted waters and pollutants. The Staff Report includes Table 1, which demonstrates that none of the waters are listed for all of the metals discussed in this TMDL. Only Reach 1 of the LA River is listed for five of the six metals discussed in the Staff Report.

The Staff Report contains an admission that there are no metals listings for Reach 3 and Reach 5, which coincidentally are the two reaches of the river where the City of Los Angeles' POTWs discharge. (*See* Staff Report pages 11-12 and 86.) A TMDL is not required where waters are not listed.

The Clean Water Act requires states to identify waters within its boundaries for which the effluent limits required under sections 1311(b)(1)(A) and 1311(b)(1)(B) are not stringent enough to implement any water quality standard applicable to such waters. 33 U.S.C. §1313(d)(1)(A). This identification is known as the State's "303(d) List." For waters identified on a State's 303(d) List, the state must then establish a TMDL for those pollutants suitable of such calculation. 33 U.S.C. §1313(d)(1)(C). The State has no obligation or authority to perform a TMDL for waters not included on the State's 303(d) List.

USEPA Region IX should not have allowed this TMDL to be drafted to apply to non-listed waters. In fact, USEPA Region IX in a May 6, 2003 letter provided the following recommendation to this Regional Board stating the following:

- If the Regional Board is adopting a TMDL for a segment or pollutant that is not included in the current 303(d) list, the Regional Board should clearly identify such segment as a water quality limited segment needing a TMDL for the identified pollutant. *See* May 6th Letter to Dennis Dickerson from USEPA Region IX (attached as Exhibit 4) at page 1.

- The Regional Board should provide a specific record supporting the conclusion that this is a water quality limited segment.

- The Regional Board should indicate why it is important to adopt a TMDL for this segment and pollutant at this time.

- The Regional Board should public notice the identification of the segment as a water quality limited segment needing a TMDL either before or as part of the public notice for the TMDL and the record of impairment should be available for public review during the public comment period. *Id.* at 2.

USEPA Region IX wrote this letter as part of a settlement of the Trash TMDL and recommended this process as a way to ensure that TMDL development is clear and transparent to the general public. USEPA Region IX also stated that it "plans to follow this same process when developing any USEPA TMDLs." *Id.*

However, both the Regional Board and USEPA Region IX seem to be ignoring the statutory requirements as well as the recommendations and commitments made in this letter. The Metals TMDL should limit the WLAs and LAs for each pollutant to only those reaches of the River and its tributaries that have actually been deemed "impaired" and included on the 303(d) List. The Regional Board and USEPA Region IX have not publicly notice additions to the 303(d) List, and therefore those additions cannot be added without renoticing for public comment. In addition, the record does not demonstrate that there are,additional water quality limited segments for metals and instead recognizes that there are no impairments for most metals in most reaches. For these reasons, the TMDL must be scaled back to comply with statutory requirements.

(3) For those waters where it is determined that the TMDL is not required consistent with the federal requirements, the Regional Board should stop work on the TMDL and propose to delist the waterbody and/or pollutant. *See* May 6, 2003 Letter to Dennis Dickerson from USEPA Region IX (Exhibit 5).

In this case, the Regional Board found that there are no applicable water quality standards for aluminum being exceeded and thereby needing a TMDL. However, the Regional Board makes no attempt to de-list this water and merely states that there "are not water quality standards requiring TMDL development at this time." (See Staff Report pages 25-26.) Aluminum should not only not be part of this TMDL, it should be delisted from the waters that are currently identified (i.e., Reach 1 of the LA River).

Similarly, cadmium should be delisted. The Staff Report at pg. 23 states that there were zero exceedances of the CTR limits in Reaches 3, 4, and 5 and "apparent exceedances of the chronic criteria" in the Burbank Western Channel. But, the data only revealed "1 out of 96 samples exceeded the criteria." Staff Report at 23. This single exceedance should not be the basis for listing. Furthermore, although the Staff Report cites 12 detections out of 136 samples, the maximum concentration was 1.45 µg/L, far below the CTR freshwater chronic criteria of 2.2 µg/L. Further, the Staff Report at page 60 states that "there was little evidence of wet-weather exceedances and that estimates of wet-weather loadings were well below the allowable load." For these reasons outlined in the Staff Report, the listing for cadmium, which was highlighted as inappropriate in the 2002 listing cycle, should be overturned and all WLAs and LAs for cadmium removed from the TMDL.

(4) Other listings are suspect because the listings arose from applying the CTR criteria to stormwater samples. Staff Report at 23-26. CTR criteria are ambient water quality criteria [65 Fed. Reg. 31683 (May 18, 2000); 40 C.F.R. §131.38(a)], applicable to the receiving water not to direct samples of stormwater or wastewater that have not been fully mixed in the receiving water. Any listings of metals based on this comparison of effluent or stormwater to the CTR criteria should be overturned and not included in this TMDL. Only once actual receiving water data confirms the existence of regular exceedances of the applicable water quality standards should these waters/pollutants be returned to the 303(d) list. It is questionable whether episodic exceedances should be listed. The Staff Report at page 78 admits that a "review of the available water quality data suggests that applicable CTR limits are being met most of the time during dry weather, with episodic exceedances."

(5) By applying the Metals TMDL's WLA to municipal storm water discharges, the Regional Board and USEPA are inappropriately applying the Clean Water Act ("CWA") Section 303(d) TMDL program to discharges from municipal separate storm sewer systems ("MS4s"). The Clean Water Act expressly provides that permits for discharges from MS4s are not to require compliance with the requirements set forth in CWA sections 301(b) or water quality standards set forth in CWA sections 302 and 303, but rather, such permits shall contain the requirements set forth in CWA §402(p), namely controls to reduce discharges "to the maximum extent practicable." (*See* CWA §402(p)(3)(b)(iii); 33 U.S.C. § 1342(p)(3)(B)(iii).) The adoption of new requirements in the form of waste load allocations applicable directly to stormwater, at a cost of over $1 Billion to these dischargers, is hardly the equivalent of reducing discharges to the maximum extent practicable.

(6) The standard flow measurements are using the Wardlow River Road station. (*See e.g.,* Staff Report page 31.) However, the TetraTech Report (May 2004) on page 21 states that "it is presumed that this station is associated with

the incorrect flow measurements." It is unclear why this apparently incorrect station is being used as the flow gauge for the TMDL.

D. Other Legal Issues:

(1) The TMDL does not identify the actual uses of the waters to which it applies and how the applicable water quality standard is not being implemented.

CWA Section 303(d) requires states to identify those waters within its boundaries where the effluent limitations required are not stringent enough to implement any water quality standard applicable to such waters. 33 U.S.C. § 1313(d)(1)(A). The state must establish a priority ranking for such waters, "taking into account the severity of the pollution and the uses to be made of such waters." *Id.* (emphasis added).

Thus, TMDLs are to be developed for the waters identified on the 303(d) list, based on the actual "uses to be made" of the waters in issue. The Regional Board's Basin Plan includes uses for the LA River, including "existing," "potential," and "intermittent" beneficial uses. From these uses, the Regional Board must under CWA Section 303(d) identify the actual "uses to be made" of these waters, which would render "potential" uses irrelevant for TMDL purposes.

The plain language of CWA Section 303(d)(1)(A) that the use is one "to be made" in the water body, not mere theoretical uses, such as MUN. Thus, the TMDL must be narrowed and established based on those uses which the Regional Board has expressly determined will be made of the water bodies at issue. Then, for each use to be made, the Regional Board must identify the corresponding water quality criteria set specifically to protect that use and provide the data to show how both the use and criteria are "impaired."

No evidence exists in the record indicating the method by which the Regional Board determined how any particular level and type of metals impairs the beneficial uses of the LA River Watershed, and how that impairment figured into the allocations contained therein.

(2) The Metals TMDL is a "Rule" that must comply with the APA.

The California Administrative Procedures Act ("APA") establishes basic procedural requirements for the adoption, amendment, or repeal of administrative regulations. *See* Cal. Gov't Code §§ 11340 *et seq.* Defendants are state agencies subject to the APA. *See* Gov't Code § 11000; 23 Cal. Code Regs. § 649.1. The APA provides that no State agency shall issue, utilize, enforce, or attempt to enforce any guideline, criterion, bulletin, manual, instruction, order, or standard of general application unless first adopted as a regulation and filed with the Secretary of State. *See* Gov't Code § 11340.5(a). Unless promulgated in substantial compliance with the APA requirements and supported by substantial

evidence in the administrative record, administrative regulations are without legal effect. *Id.*

A "Regulation" is defined by the APA as "every rule, regulation, order, or standard of general application or the amendment, supplement, or revision of any rule, regulation, order, or standard adopted by any state agency to implement, interpret, or make specific the law enforced or administered by it, or to govern its procedure." *See* Cal. Gov't Code § 11342.600. However, the APA exempts the "adoption or revision of state policy for water quality control and the adoption or revision of water quality control plans and guidelines pursuant to Division 7 (commencing with Section 13000) of the Water Code" from the general requirements of the APA and instead, subjects these policies or plans to abbreviated alternative rulemaking procedures. *See* Gov't Code § 11353(a) - (b). The Regional Board attempts to avoid the more comprehensive requirements of the APA by asserting the adoption of the Metals TMDL is simply a revision to the Basin Plan; since the Regional Board claims that the numeric targets contained in the Metals TMDLs are not new water quality objectives and are not independently enforceable.

Contrary to these statements, the Metals TMDL for the LA River Watershed is not merely a water quality control policy or plan adopted pursuant to Sections 13000 *et seq*. of the Water Code. Rather, the Metals TMDL, and the numeric targets contained therein, are rules, regulations or standards of general application adopted to implement, interpret, and make specific requirements of the Clean Water Act. *See* CWA § 303(d)(1)(C) and 303(d)(2); *see also Sierra Club v. Environmental Protection Agency*, 162 F.Supp.2d 406, 419-20 (D. Md. 2001)(finding that development of a list or load [TMDL] under the Clean Water Act constitutes a rulemaking for which notice must be provided.); *see accord Asarco Inc. v. State of Idaho*, Order on Summary Judgment, Case No. CV-00-05760 (D. Id. 2001)(the establishment of the TMDL involved "rulemaking.")

Because the Metals TMDL is a stand alone regulations promulgated under the requirements of the Clean Water Act, and not policies or plans adopted independently pursuant to Sections 13000 *et seq.* of the Water Code, the Regional Board is not entitled to rely upon the alternative rulemaking procedures specified in Gov't Code § 11353(a)-(b) when adopting the TMDL. Instead, when promulgating this TMDL, the Regional Board is required to comply with the comprehensive rulemaking procedures specified in Gov't Code §§ 11340 *et seq*. The Public Notice did not include the legally required Peer Review [CA Health and Safety Code, §57004]. It is critical for Burbank and all others who review this TMDL to see what the Peer Review panel has said about this Basin Plan Amendment. Carrying out the peer review process required by the State Water Resources Control Board is not only a legal requirement, but could also greatly improve the TMDL report, which makes numerous unsubstantiated assertions and fails to scientifically state uncertainties and assumptions.

The adoption of a Basin Plan amendment to incorporate a TMDL into the Basin Plan prior to, and without, the USEPA's approval of the TMDL is contrary to CWA section 303(d)(2) and 40 C.F.R. §130.7(d)(2).

(3) The Regional Board's Metals TMDL violates the Foundational Requirements of the Clean Water Act.

The Metals TMDL violates the CWA in several ways. First, the State has not complied with the proper CWA foundational requirements prior to embarking on this TMDL. *See* CWA §§ 208(b), 303(e), 305(b). These foundational requirements include developing a Continuing Planning Process, approved by the USEPA, that meets the requirements of section 303(e) of the CWA; developing an approved area-wide waste treatment planning process pursuant to section 208(b) of the CWA ("208 Plan"); and developing a proper 305(b) Report that meets all of the statutory requirements. Additionally, the Metals TMDL attempts to impose standards under section 301 of the CWA to for discharges from municipal storm drains, while discharges from municipal storm drains are not subject to section 301-based standards, and are only subject to the requirements set forth in section 402(p)(3)(B) of the CWA.

The CWA mandates the listing of those waters for which effluent limitations required by sections 301(b)(1)(A) and section 301(b)(1)(B) "are not stringent enough to implement any water quality standard applicable to such waters." 33 U.S.C. § 1313(d)(1)(A) (CWA, § 303(d)(1)(A)). Once these waters are identified, the state must establish TMDLs for pollutants in those waters. 33 U.S.C. § 1313(d)(1)(C) (CWA § 303(d)(1)(C)).

Section 303(e) provides that each state must have a Continuing Planning Process ("CPP") approved by the USEPA which includes: (1) effluent limitations and schedules of compliance; (2) incorporation of all elements of any applicable area-wide waste management plans and applicable basin plans; (3) TMDLs; (4) procedures for revision; (5) adequate authority for intergovernmental cooperation; (6) adequate implementation, including compliance schedules, for revised or new water quality standards; (7) controls over disposition of residual waste from water treatment processing; and (8) inventory and ranking of needs for construction of waste treatment works. 33 U.S.C. § 1313(e). This CPP must be approved by USEPA before a state permitting program under Chapter IV of the CWA may be approved. 33 U.S.C. § 1313(e)(2). California currently does not have a current continuing planning process that meets all of the statutory requirements that has been approved by the USEPA. Thus, no permits may be issued pursuant to the Metals TMDL unless and until such a CPP has been approved.

Section 208(e) of the CWA similarly provides that "No permit under section 1342 of this title shall be issued for any point source which is in conflict with a plan approved pursuant to subsection (b) of this section." 33 U.S.C. § 1288(e).

Section 208(b) requires the preparation of a continuing area-wide waste treatment planning process "208 Plan." 33 U.S.C. § 1288(b). California has not prepared an annual updated and certified 208 Plan required by CWA section 208(b). Therefore, no permits may be issued to implement the Metals TMDL requirements until such a 208 Plan has been developed, so it can be determined whether the permit is consistent with that Plan.

Section 305(b) of the CWA mandates that states estimate the environmental impacts and economic and social costs and benefits of meeting the CWA's objectives, as well as the costs of implementing non-point source controls for pollutants. California's 305(b) reports have thus far failed to fully comply with these CWA mandates. As a statutory mandate that preceded the first required 303(d) list or TMDL, this requirement is an important foundational step in the adoption of TMDLs that has been ignored.

Finally, section 301 of the CWA imposes requirements for effluent limitations on certain point sources. However, the CWA expressly provides that permits for discharges from municipal storm drains are *not* subject to section 301, but rather such permits shall require controls to reduce discharges "to the maximum extent practicable." 33 U.S.C. § 1342(p)(3)(B)(iii); *see Defenders of Wildlife v. Browner*, 191 F.3d 1159 (9th Cir. 1999). In other words, the CWA does not impose section 301 requirements on municipal storm drains. In this case, however, the Regional Board is attempting to impose section 301 water-quality-based requirements on municipal storm drains through the Metals TMDL. Such action is contrary to, and therefore violates the CWA.

(4) The Regional Board failed to adequately comply with CEQA.

The California Environmental Quality Act ("CEQA") requires the preparation of an environmental impact report ("EIR") for projects having a potential significant effect on the environment, or a negative declaration if the initial environmental study reveals no potential for significant environmental effects. *See* Cal. Pub. Res. Code § 21000, *et seq.* The underlying purpose of CEQA is to "compel government at all levels to make decisions with environmental consequences in mind." *See City of Sacramento v. State Water Resources Control Board*, 2 Cal. App. 4th 960, 969 (1992).

When a public agency proposes to carry out or approve a project that may have a significant effect on the environment, the public agency must comply with the comprehensive requirements set forth in CEQA, including the preparation and certification of an EIR that considers the potential environmental impacts, alternatives, and mitigation measures. *See* Cal. Pub. Res. § 21100 *et seq.* The Regional Board is a public agency, subject to the requirements set forth in CEQA. *See* Cal. Pub. Res. Code § 21063.

The adoption of the Metals TMDL is a "project," which is defined as an activity by a public agency which may cause either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment. *See* Cal. Pub. Res. Code § 21065. The Regional Board failed to provide any evidence in the record of compliance with the requirements of Public Resources Code section 21100 *et seq*. when adopting this Metals TMDL.

At the time of the adoption of a rule or regulation requiring the installation of pollution control equipment, or a performance standard or treatment requirement, the Regional Board must, at the very least, perform an environmental analysis of the reasonably foreseeable methods of compliance. *See* Cal. Pub. Res. Code §§ 21159; 21159.4. The environmental analysis shall, at a minimum, include all of the following:

(a) An analysis of the reasonably foreseeable environmental impacts of the methods of compliance;
(b) An analysis of reasonably foreseeable feasible mitigation measures;
(c) An analysis of reasonably foreseeable alternative means of compliance with the rule or regulation; and
(d) A reasonable range of environmental, economic and technical factors, population and geographic areas, and specific sites. *See* Cal. Pub. Res. Code § 21159(a) and (c).

The Regional Board has not provided any evidence in the record that it complied with the requirements of Public Resources Code section 21159. The evidence in the record indicates that the Regional Boards' only attempt to comply with CEQA was to develop a deficient Environmental Impacts checklist to satisfy the more limited requirements for actions taken pursuant to a certified regulatory program under 14 C.C.R. sections 15250 *et seq*.

Even with a certified regulatory program, the Regional Board must specifically prepare a substitute document for an EIR or negative declaration, which includes at least the following items:

(a) A description of the proposed activity; and
(b) Either:
  (1) Alternatives to the activity and mitigation measures to avoid or reduce any significant or potentially significant effects that the project might have on the environment, or
  (2) A statement that the agency's review of the project showed that the project would not have any significant or potentially significant effects on the environment and therefore no alternatives or mitigation measures are proposed to avoid or reduce any significant effects on the environment. This statement shall be

> supported by a checklist or other documentation to show the possible effects that the agency examined in reaching this conclusion.

See 14 C.C.R. § 15252; *see also* 23 C.C.R. § 3777 (requiring a brief description of the proposed activity, reasonable alternatives to the proposed activity, and mitigation measures to minimize any significant adverse environmental impacts of the proposed activity).

Although recognizing the requirement to submit a written report which describes the proposed activity, the potential significant adverse impacts, the reasonable alternatives and the mitigation measures to minimize any potential significant adverse impacts (see cover to CEQA Checklist), the Regional Board's Environmental Impacts checklist and Discussion of Environmental Evaluation fail to satisfy the applicable requirements.

The Environmental Impacts checklist for the Metals TMDL inappropriately found no potential, short-term, cumulative, or substantial adverse environmental impacts resulting from the load allocations contained in this TMDL or from the implementation procedures for this TMDL. However, the Environmental Impacts checklist and Discussion of Environmental Evaluation failed to provide any explanation or grounds supporting the conclusions that no potential, short-term significant, or cumulative environmental impacts may be associated with this TMDL. Furthermore, these conclusions contradict the Regional Board's later declaration that "specific projects employed to implement the TMDL may have significant impacts," and defers these projects to a "separate environmental review." (*See* Discussion of Environmental Evaluation page 13.) This deferral of review is contrary to reviewing the cumulative impacts at the earliest possible point. *See* Pub. Res. Code §21003.1(a); §21083(b)(definition of "cumulatively considerable").

The Environmental Impacts checklist and Discussion of Environmental Evaluation are skeletal analyses that fail to set forth the requisite basis for the findings being made. The environmental review is a superficial analysis of the potential environmental impacts that will result from the TMDL. The Environmental Impacts checklist and Discussion of Environmental Evaluation are not supported by substantial evidence in the record.

The implementation of the Metals TMDL may cause potentially substantial adverse changes in the environment that have not been adequately addressed in Environmental Impacts checklist or the Discussion of Environmental Evaluation and for which no alternatives or mitigation measures have been analyzed, suggested, or required.

Thank you for the opportunity to submit comments. If you have any questions, please call me at (818) 238-3931.

Sincerely,

Rodney Andersen, Principal Civil Engineer

cc: Bruce S. Feng, City Manager/Public Works and Capital Projects
Bonnie Teaford, Chief Assistant Public Works Director – City Engineer